Aram Edgar Khalili

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Executive Summary

A detail- and team-oriented, bilingual computer scientist with strong analytical & problem-solving skills who can absorb new information quickly.

Experience

Research Scientist, BAE Systems AIT (formerly Alphatech, Inc)
January 2004 - present
Designed, implemented and demonstrated a cooperative, distributed multi-agent system on three mobile robots (*Activ*Media Pioneer 3DX); developing and deploying Win32 API sensor for Anomaly Detection framework

Graduate Assistant, University of Maryland Computer Science Department
August 1998 - January 2004
Research in Information Security and Cryptology including sensor networks and key management, support research with software development, write papers & grant proposals, contributed to successful $2,000,000 proposal, present work & papers to others, teach class as substitute, lead class discussion sections of 40 students each, create/review/grade papers/exams/projects, advise students in office hours

Research Intern, NAI Labs (previously TIS Labs, currently Sparta ISSO) Crypto Group
August 1998 - March 2002
Participated in several research projects in active networks, wireless networks, distributed network defense; developed software to support research, assessed vulnerabilities & security technologies, contributed to reports for customers, maintained research computers and networks

Demo Co-op, Silicon Graphics Inc.
March 1998 - July 1998
Responsible for demo systems, including maintenance and administration, inventory, web pages; developed web-based scheduling system, assisted in set up for user group meetings and government trade show, other functions as needed

Summer Intern, Johns Hopkins University Applied Physics Lab
Summer 1997
Developed graphical interface to replace an old text based one for a distributed, multithreaded, multiplatform application

Summer Intern, Johns Hopkins University Applied Physics Lab
Summer 1996
Developed web frontend for SQL Server database on WindowsNT

Education

University of Maryland	University of Maryland Baltimore County
College Park, Maryland	Baltimore, Maryland
Master of Science in Computer Science	Bachelor of Science in Computer Science and Mathematics
December 2002, GPA 3.5 out of possible 4.0	August 1998, GPA 3.81 out of possible 4.0

Honors & Awards

University of Maryland Graduate Fellowship, 1998-2000   Bachelor Degree magna cum laude
Outstanding Senior Award, CS Department Spring 1997   Dean's List four of four semesters at HCC
Dean's List/academic honors four of five semesters at UMBC   Member of Phi Theta Kappa Honorary Society
Member of Upsilon Pi Epsilon, CS honor society   American Mathematical Association Of Two Year
Colleges Certificate of Merit, 1993/94 and 1994/95

Skills

Computer Science Operating systems, networks, Protocol design & analysis, PKI, Cryptology & provable security, Software engineering	**Mathematics** (Real) analysis, abstract algebra, Number theory, logic
Computer Operating Systems Linux, FreeBSD, IRIX, SunOS/Solaris, MS Windows	**Programming Languages** C, C++, Java, Assembly (x86), Korn shell, Visual C++, JavaScript, Perl, (SQL)
Libraries, Packages emacs, Motif, Maple, pthreads OpenSSL, libpcap, LaTeX, CVS, SVN	**Languages** English (fluent), German (fluent)

Publications

"A Pairwise Key Pre-Distribution Scheme for Wireless Sensor Networks", with W. Du, J. Deng, Y.S. Han, P.K. Varshney and J. Katz, *ACM Transactions on Information and Systems Security* 8(2): 228-258, 2005

"Toward Secure Key Distribution in Truly Ad-Hoc Networks" with J. Katz and W. Arbaugh, *IEEE Workshop on Security and Assurance in Ad-Hoc Networks*, Orlando, January 2003

"Security of wireless ad-hoc networks", with W. Arbaugh, in submission to *ACM Computing Surveys.*

"User-mode API for tape libraries", Freenix track of the *USENIX Annual Technical conference*, New Orleans, June 1998

Extracurricular activities

Election Protection 2004 Volunteer
Member of USENIX Association
Member of IACR Association
Computer Science delegate to Graduate Student Government 2001-2003
Member of Executive Council, Computer Science Department UMCP 2001
Chairman, European Graduate Student Association, UMCP 1999-2001
Member of fencing club (UMBC & UMCP) 1995∼2003
Member of chess club (UMBC & UMCP) 1995∼2003
Member of the Computer Science Council of Majors (CSCM) at UMBC 1995-1998
Student representative on Curriculum and Instruction committee at HCC, Fall 1994
Vice President of Service, Alpha Alpha Sigma Chapter of Phi Theta Kappa at HCC, Fall 1994 - Spring 1995
Officer of Public Relations, Science and Engineering Club, HCC, Spring 1994

References

Available upon request.

Status

U.S. citizen